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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,981	12/11/2003	Toshihiko Munetsugu	32161US2	1257

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EXAMINER
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NGUYEN, MAIKHANH

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/733,981

Applicant(s)

MUNETSUGU ET AL.

Examiner

Maikhanh Nguyen

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08/24/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 37-63 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 60-63 is/are allowed.
- 6) ☒ Claim(s) 37-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>06/05/2006</u> . | 6) <input type="checkbox"/> Other: _____  |

***DETAILED ACTION***

1. This Office Action vacates the finality of the previous Office Action, which was mailed on 03/20/2006. In the previous Office Action, Examiner addressed the Applicant's amendment filed on 12/23/2005. However, Applicant has submitted a supplemental amendment on 03/14/2006. Accordingly, this action is responsive to the Interview Summary and Remarks filed 08/24/2006, and a new final rejection is provided below.
2. Claims 37-63 are currently pending in this application. Claims 1-36 have been canceled. Claims 37-63 have been added. Claims 37, 47, 57 and 60 are independent claims.

It is noted that Applicant states "*new claims 37-64 have been added*" (see Remarks, page 13), however, a review of the Image File Wrapper (IFW) indicates that only claims 37-63 have been submitted.

***Specification***

3. It is noted that applicant has other related applications (e.g., application # 09/467,231 filed 12/20/1999 and application # 09/785,063 filed 02/16/2001). It is requested that any related application be referred to in the first sentence of the specification. Applicant is

also requested to supply the serial numbers of any other related applications currently pending before the U.S Patent & Trademark Office.

### *Double Patenting*

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. CIT. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Uogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 C.F.R. ' 1.321(b) would overcome an actual or provisional rejection on this ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 C.F.R. ' 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 37-63 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 83-104 of copending Application No. 09/467, 231 (see claims 83-104 as submitted in the amendment filed

7/06/2006). Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 37 of the instant application and claim 83 of copending Application No. 09/467, 231 both claim *a data processing apparatus for processing media content comprised of a plurality of scenes, the apparatus comprising, an input unit operable to input content description data including: a plurality of importance attributes each associated with one of the segments and having a value representing a degree of contextual importance of the corresponding one of the segments; and an output unit operable to output at least one of the segments based on at least one of the importance attributes*. The difference between claim 37 of the instant application and claim 83 of copending Application No. 09/467, 231 is claim 37 of the instant application further claims *a context attribute having value for describing a context of the media content* and claim 83 of copending Application No. 09/467, 231 claims *the important attributes having a value representing a degree of contextual importance of the corresponding one of the plurality of segments*. The difference would have been obvious to a person of ordinary skill in the art at the time the invention was made since the claim limitations appear to have been reworded, however, the scope of the invention appears to be generally the same.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 37-63 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 37-49 of copending Application No. 09/785, 063 (see claims 37-49 as submitted in the amendment filed 02/13/2006). Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 37 of the instant application and claim 37 of copending Application No. 09/785, 063 both claim *a data processing apparatus for processing media content comprised of a plurality of scenes, the apparatus comprising, an input unit operable to input content description data including: a context attribute having a value for describing a context of the media content, a plurality of importance attributes each associated with one of the segments and having a value representing a degree of contextual importance of the corresponding one of the segments; and an output unit operable to output at least one of the segments based on at least one of the importance attributes*. Furthermore, the differences between claim 37 of the instant application and claim 37 of copending Application No. 09/785, 063 would have been obvious to a person of ordinary skill in the art at the time the invention was made, since claim 37 of the instant application represents the invention in broader scope. The claim limitations appear to have been reworded, however, the scope of the invention appears to be generally the same.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

*This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).*

8. Claims 37, 39-45, 47, 49-54, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Smith et al.** "Video Skimming and Characterization through the Combination of Image and Language Understanding Techniques", 17-19 June 1997, pp. 775-781.

**As to claims 37 and 47:**

Smith teaches a data processing apparatus and method for processing media content comprised of a plurality of scenes (*see Abstract*), the apparatus comprising:

- a plurality of segments each for describing one of the plurality of scenes of media content, the content description (*e.g., selection video and audio portions ... This*

*segment contains 71 scenes, of which, skim A has captured 23 scenes, and skim B has captured 17 scenes; section 3.4)* data further including:

- a context attribute having a value for describing a context of the media content (*e.g., text in the video provides significant information as to the content of a scene; section 2.4), and*
- a plurality of importance attributes each associated with one of the segments and having a value representing a degree of contextual importance of the corresponding one of the segments (*e.g., identifying the most significant words in a given scene, and for image understanding, it entails segmentation of video into scenes, detection of objects of importance 'face and text' and identification of the structure motion of a scene; section 1.2); and*
- an output unit operable to output at least one of the segments based on at least one of the importance attributes (*e.g., extract the significant audio and video information and create a "skim" video which represents a very short synopsis of the original; see Abstract / display only the video pertaining to a segment's content ... It would show less video than the original and could be used to sample many segments without viewing each in its entirety. The amount of content displayed should be adjustable so the user can view as much or as little video as needed, from extremely compact to full-length video; section 1.1 & also see Fig. 7).*



Smith does not specifically teach “*input content description data*”. However, Smith suggests “*an choosing the ‘significant images and word’ that should be included in the skim video*” (section 1.2 & also see fig.3).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include Smith’s teaching for “*input content description data*” because it would have provided the capability for identifying the most significant words in a given scene as well as it entails segmentation of video into scenes and identification of the structure motion of a scene.

**As to claims 39 and 49:**

Smith teaches the content description data includes supplemental information (*e.g., the amount of content displayed should be adjustable so the user can view as much or as little video as needed; see section 1.1*).

**As to claims 40 and 50:**

Smith teaches the media content corresponds to video data and/or audio data (*e.g., video information as well as audio information; see Abstract & section 1.1*).

**As to claims 41 and 51:**

Smith teaches each of the plurality of segments is provided with linkage information for linking to dominant data that represents the segment (*see Abstract*).

**As to claims 42 and 52:**

Smith teaches the dominant data is one or more of text data, image data and audio data (*e.g., the audio portion; section 1.1 & audio and images embedded within the video; section 1.2*).

**As to claims 44 and 54:**

Smith teaches the context description data is previously generated outside of the data processing apparatus prior the inputting (*see section 3.2*).

**As to claims 43 and 53:**

Smith teaches a plurality of context attribute and a plurality of importance attributes are associated with one segment (*e.g., scenes, segments, and individual frames in video ... identifying the most significant words in a given scene, and for image understanding, it entails segmentation of video into scenes ... objects of importance 'face and text' and identification of the structure motion of scene; section 2*).

**As to claims 45 and 55:**

Smith teaches the output unit is operable to output in response to a user query regarding the context (*e.g., the relevant portions of video for the segments related to their query; section 1.1*).

9. Claims 38, 46, 48, and 56- 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Smith et al.** in view of **B. Arons**, "SpeechSkimmer: A System for Interactively Skimming Recorded Speech," ACM, March 1997, pp. 3-38.

**As to claims 38 and 48:**

Smith does not specifically teach "*the plurality of segments are hierarchically described.*"

Arons teaches the plurality of segments are hierarchically described in the data structure portion (*e.g., a hierarchy of segments can be created that roughly correspond to the spoken equivalents of sections, subsections, paragraphs, and sentences of a written document; section 2.3*).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the feature from Arons in the system of Smith because it would have provided the capability for locating important or emphasized portions of a recording, and selecting the equivalent of paragraph or new topic boundaries, for the purpose of creating audio overviews or outlines.

**As to claims 46 and 56:**

Arons teaches the context description data further includes a plurality of time attributes each associated with a corresponding one of the segments for determining a start time and one of an end time and a duration of the scene associated with the corresponding segment (*see sections 3.2 and 4.2.9*).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the feature from Arons in the system of Smith because it would have provided the capability for locating important or emphasized portions of a recording, and selecting the equivalent of paragraph or new topic boundaries, for the purpose of creating audio overviews or outlines.

**As to claim 57:**

The rejection of claim 37 above is incorporated herein in full. Additionally, Smith teaches:

- the segment elements that are associated with the one of context attributes (*e.g., regions from video frames that contain textual information*), and having a value representing a degree of importance of the scene associated with the one of the segment elements in relation to the context of the context attribute [*section 2.4*]; and
- selection means for selecting one or more of the segments based on an analysis of the importance attributes (*e.g., choosing the "significant image and word" that*

*should be included in the skim video ...importance of each scene can be evaluated; section 1.2 & identifying significant objects that appear in the video frames is one of the key components for video characterization; section 2.4).*

Arons teaches:

- the content description data being arranged in a hierarchy (*e.g., a hierarchy of segments can be created that roughly correspond to the spoken equivalent of sections; subsections, paragraphs, and sentences of a written document; section 2.3*);
- a plurality of segment elements each being a child of one of said section elements (*see section 3.2*); and
- a plurality of time attributes each associated with a corresponding one of the segments for determining a start time and one of an end time and duration of the scene associated with the corresponding segment (*see sections 3.2 and 4.2.9*).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the feature from Arons in the system of Smith because it would have provided the capability for locating important or emphasized portions of a recording, and selecting the equivalent of paragraph or new topic boundaries, for the purpose of creating audio overviews or outlines.

**As to claims 58-59:**

They include the same limitations as in claims 44-45, respectively, and are similarly rejected under the same.

***Response to Arguments***

10. Applicant's arguments filed on 03/14/2006 have been fully considered but are deemed to be moot in view of the new grounds of rejection necessitated by Applicant's amendments.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Arman et al.            U.S. Pat. No. 5,606,655        Issued: Feb. 25, 1997
- Yeo et al.             U.S. Pat. No. 5,821,945        Issued: Oct. 13, 1998
- Ratakonda            U.S. Pat. No. 5,956,026        Issued: Sep. 21, 1999
- Moriyama et al.       U.S. Pat. No. 6,732,109        Issued: May 23, 2000
- Gu                    U.S. Pat. No. 6,075,875        Issued: Jun. 13, 2000
- Tan et al.             U.S. Pat. No. 6,356,902        Issued: Mar. 12, 2002
- Christel et al., "Evolving Video Skim into Useful Multimedia Abstraction," in Human Factors in Computing Systems, ACM CHI'98 Conference Proceedings, Los Angeles, pp. 171-178, April 1998.

- MPEG-4 Overview - Atlantic City Version "International Organisation for Standardisation Coding of Moving Pictures and Audio" pp. 1-50, October 1998.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

***Contact information***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maikhanh Nguyen whose telephone number is (571) 272-4093. The examiner can normally be reached on Monday - Friday from 9:00am – 5:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached at (571) 272-4136.

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The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MN

*William L. Bashore*  
**WILLIAM BASHORE**  
**PRIMARY EXAMINER**